

# INTERNATIONAL SEARCH REPORT

Application No  
PCT/PL2005/000022

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C07D235/30 A61K31/4184 A61P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07D A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BEILSTEIN Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	PAGANO, M. A. ET AL.: "Optimization of Protein Kinase CK2 Inhibitors Derived from 4,5,6,7-Tetrabromobenzimidazole" J. MED. CHEM., vol. 47, 2 December 2004 (2004-12-02), pages 6239-6247, XP002338109 the whole document  ----- -/--	1-21

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

27 July 2005

Date of mailing of the international search report

08/08/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Weisbrod, T

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/PL2005/000022

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	PAGANO, M. A. ET AL.: "2-Dimethylamino-4,5,6,7-tetrabromo-1H-benzimidazole: a novel powerful and selective inhibitor of protein kinase CK2" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, ACADEMIC PRESS INC. ORLANDO, FL, US, vol. 321, no. 4, 3 September 2004 (2004-09-03), pages 1040-1044, XP004599622 ISSN: 0006-291X the whole document	1,2, 16-21
X	ANDRZEJEWSKA, M. ET AL.: "Polyhalogenobenzimidazoles: synthesis and Their Inhibitory Activity against Casein Kinases" BIOORG. MED. CHEM., vol. 11, 2003, pages 3997-4002, XP002338110	1,16,18, 20
A	The whole document; in particular, page 3999, table 1, and page 4000, paragraph 1.	2-15,17, 19,21
A	WO 03/030902 A (TULARIK INC; FRENKEL, ALEXANDER, DAVID; LIVELY, SARAH, ELIZABETH; POWE) 17 April 2003 (2003-04-17) Abstract; page 2, lines 29-30; claim 19, compounds IIa; examples.	1-21
A	US 3 705 174 A (MICHAEL H. FISHER ET AL) 5 December 1972 (1972-12-05) Abstract; claims; examples.	1-21

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/PL2005/000022

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  

Although claims 20-21 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compounds.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/PL2005/000022

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03030902	A	17-04-2003	CA 2458533 A1	17-04-2003
			EP 1434579 A1	07-07-2004
			WO 03030902 A1	17-04-2003
			US 2003144286 A1	31-07-2003
<hr/>				
US 3705174	A	05-12-1972	NONE	
<hr/>				